

Experiments conducted in the field of behavioral economics provide increasing evidence of loss aversion which is a phenomenon describing asymmetric attitudes with respect to gains and losses. In line with this behavioral concept is that investors seem to show considerably stronger aversion to losses than the attraction of gains; i.e., investors are particularly sensitive to losses and eager to avoid them. We present a method that efficiently solves the problem of maximizing the expected bilinear (loss-averse) utility function. At first we formulate the optimality conditions for general bilinear utility functions then we introduce an efficient algorithm by using quantities in smaller dimensional space. Then we describe the numerical results when applying our algorithm to a series of four asset problems in which the degree of loss-aversion is increased. Finally, we provide a direct link between piecewise linear programming problem and the conditional value-at-risk, which is a downside risk measure.